

## **ABSTRACT**

### **Title: “Drug Induced Parkinsonism – A Causality, Severity, and Preventability Assessment Study In A Tertiary Care Hospital”**

Degree for which submitted : Doctor of Medicine (M.D) in Pharmacology.

Guide : Prof. Dr. C. Ramachandra Bhat, M.D.

Department : Department of Pharmacology

College : Kilpauk Medical College, Chennai.

University : The Tamilnadu Dr.MGR Medical University,  
Chennai.

Year : 2014 -2017.

Drugs when prescribed for medical illness also produce adverse effects which manifest differently according to various systems involved. Adverse drug reaction is defined as any noxious response which is suspected to be due to a drug, which occurs at doses normally used in humans for diagnosis, prophylaxis, therapy of disease or for modification of physiological function. Adverse drug reactions can cause both morbidity and mortality, which are often underestimated. Drug induced Parkinsonism is the most common type of extrapyramidal syndrome among patients on antipsychotic drugs. We investigated the profile of drug induced

Parkinsonism in the patients attending outpatient department of Psychiatry and Neurology, at Kilpauk Medical College and Hospital, Chennai, from June 2015 to June 2016. Data collected were recorded in WHO Suspected adverse reaction report form and analyzed statistically. Causality, severity and preventability assessment of adverse drug reaction were done. In conclusion, 50 cases of DIP were analyzed and found that females were more affected than males. Bradykinesia was the most common drug induced Parkinsonism symptom. The most common suspected drug to cause DIP was risperidone. When causality assessment was done, maximum ADRs were probable (88%) and rest of them were possible (12%). All the ADRs were moderately severe requiring dose reduction or discontinuation of the suspected drug and change to another drug. 60 % of ADRs were probably preventable & 40 % were not preventable. All the patients with ADRs showed improvement after treatment with trihexy phenidyl.

Hence, ADR data base studies when conducted across multiple centres, early warning signals for preventing adverse drug reactions could be easily identified.

**Keywords:** ADR, WHO, Causality, Drug Induced Parkinsonism